

FIG. 1

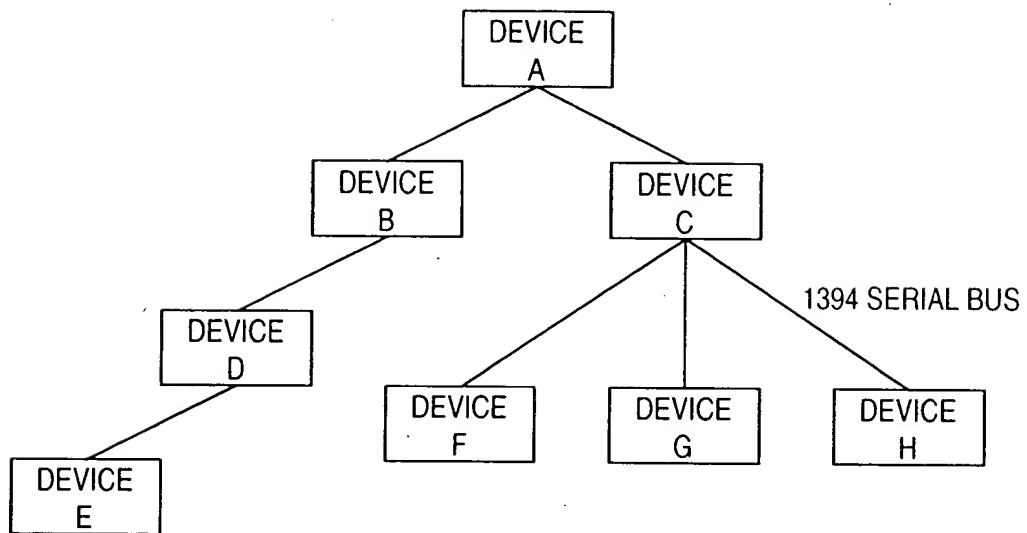


FIG. 2

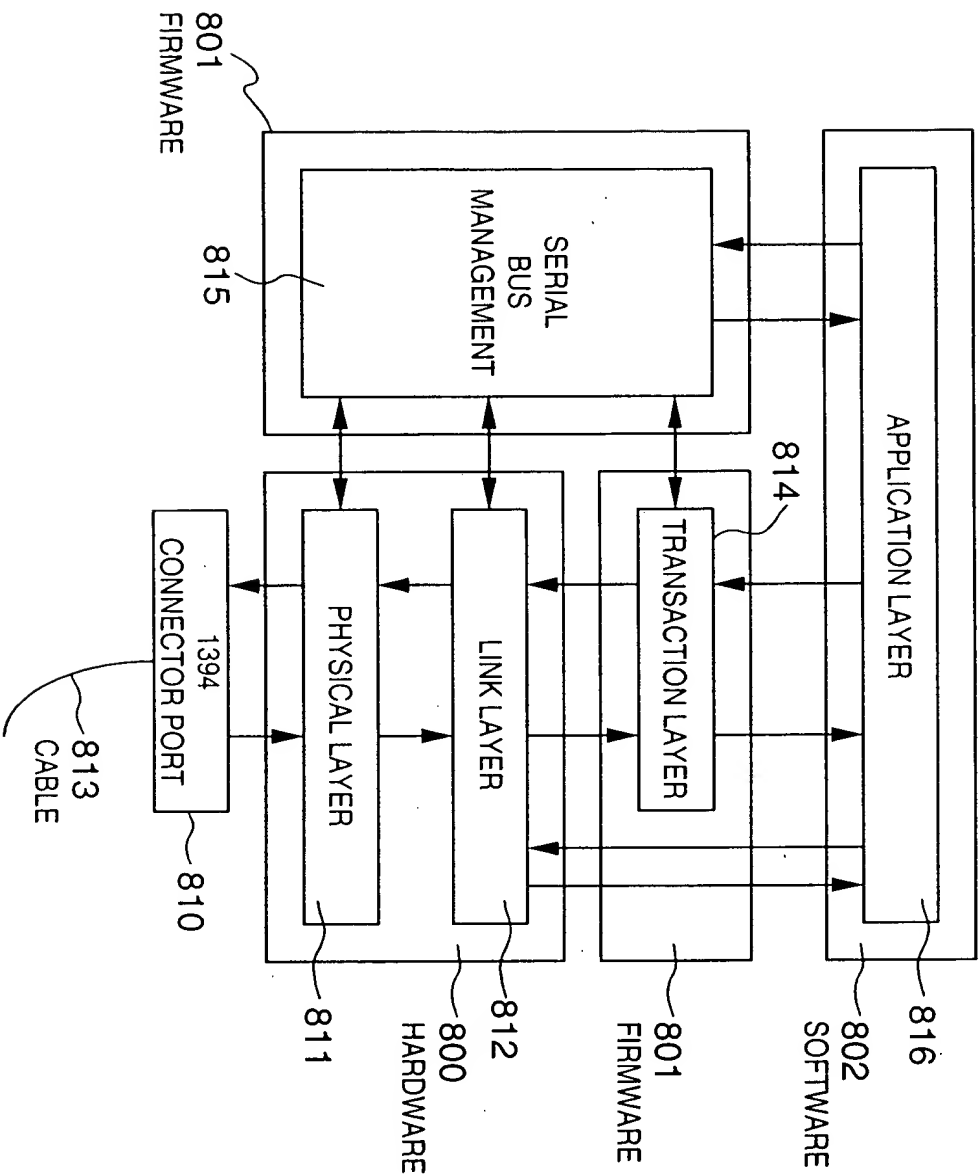


FIG. 3

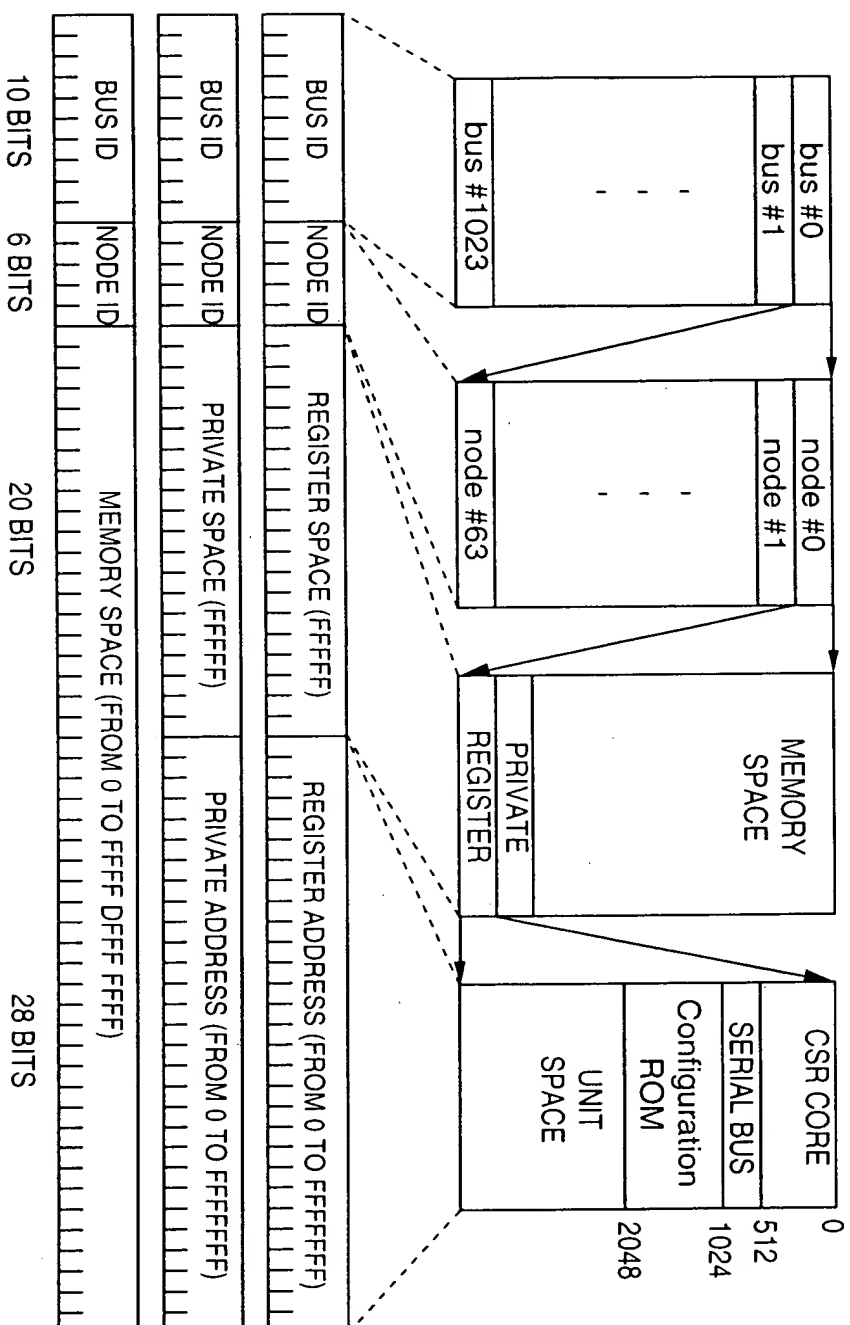


FIG. 4

CABLE CROSS SECTION

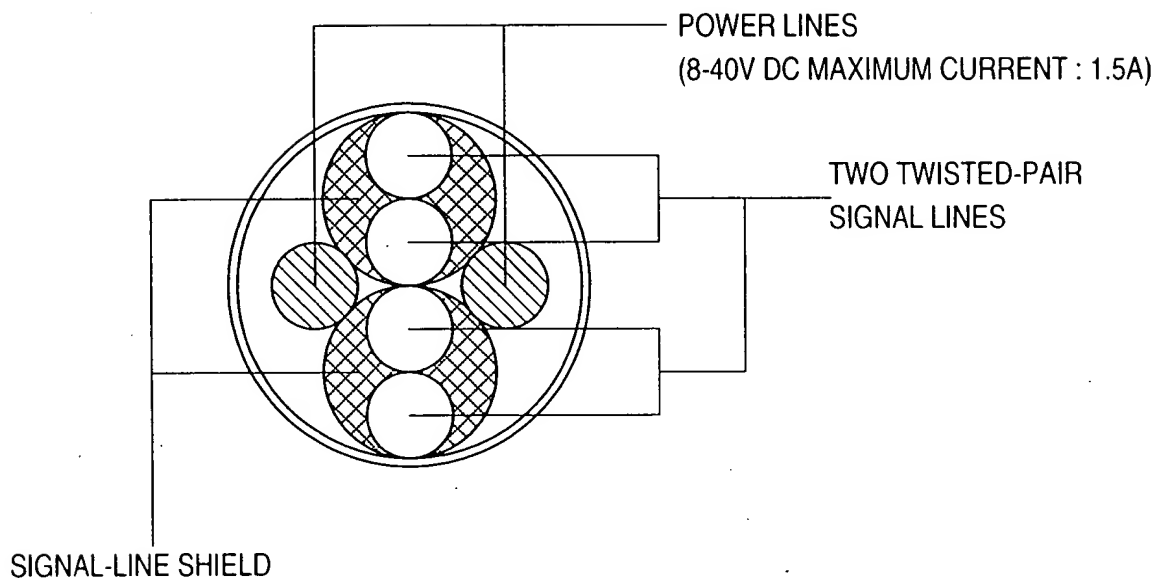
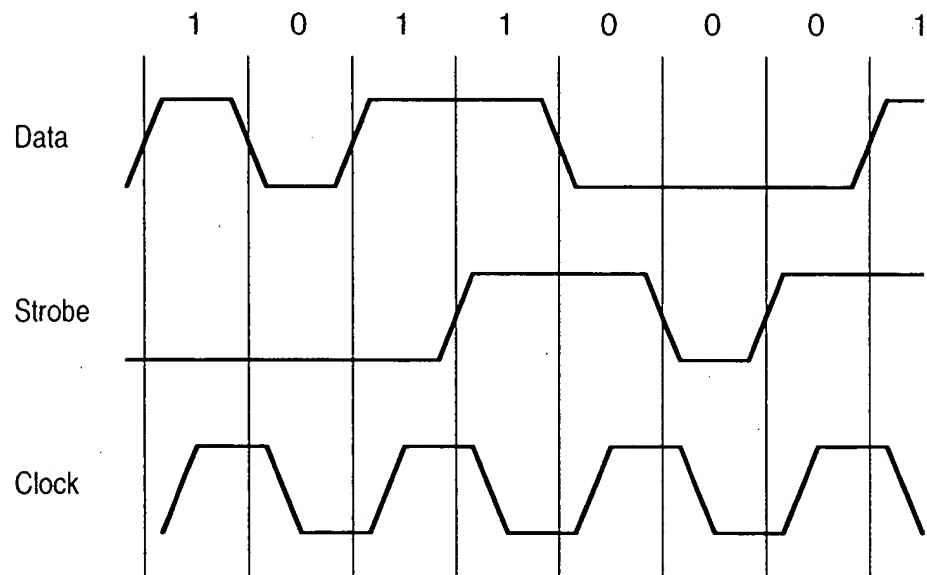


FIG. 5

EXCLUSIVE-OR SIGNAL BETWEEN Data AND Strobe



Dated: 10/10/2020

FIG. 6

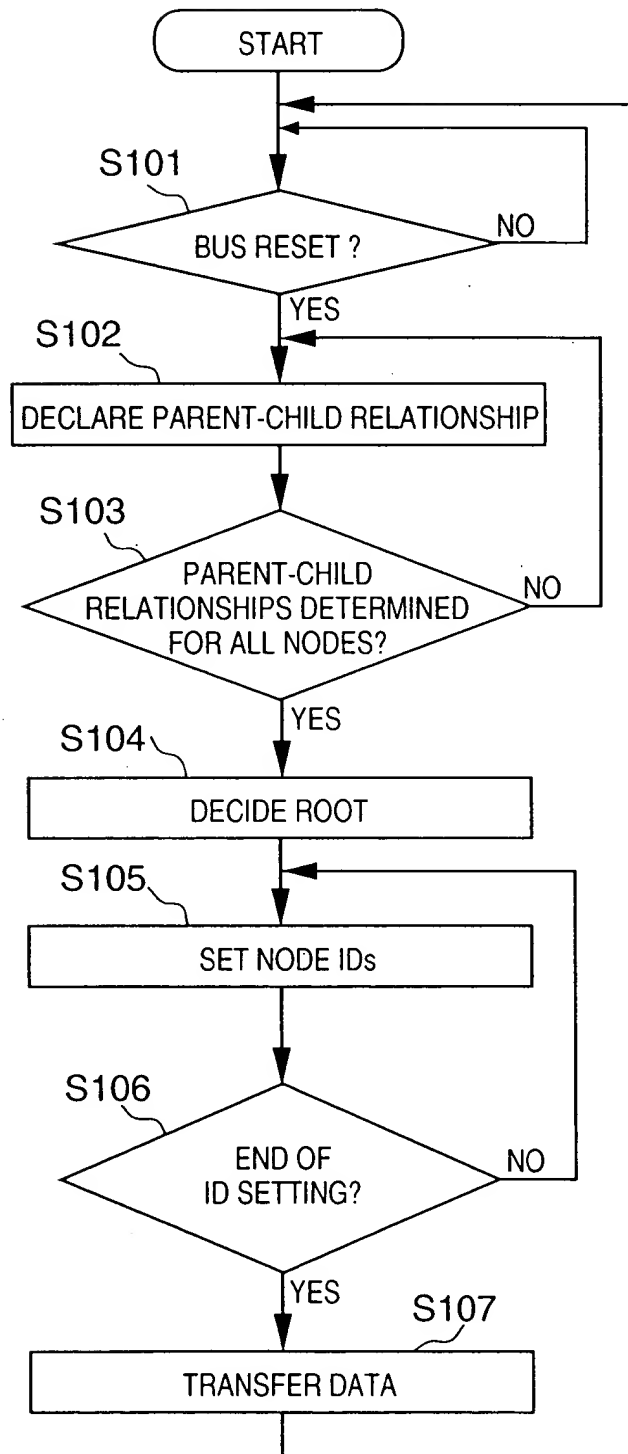
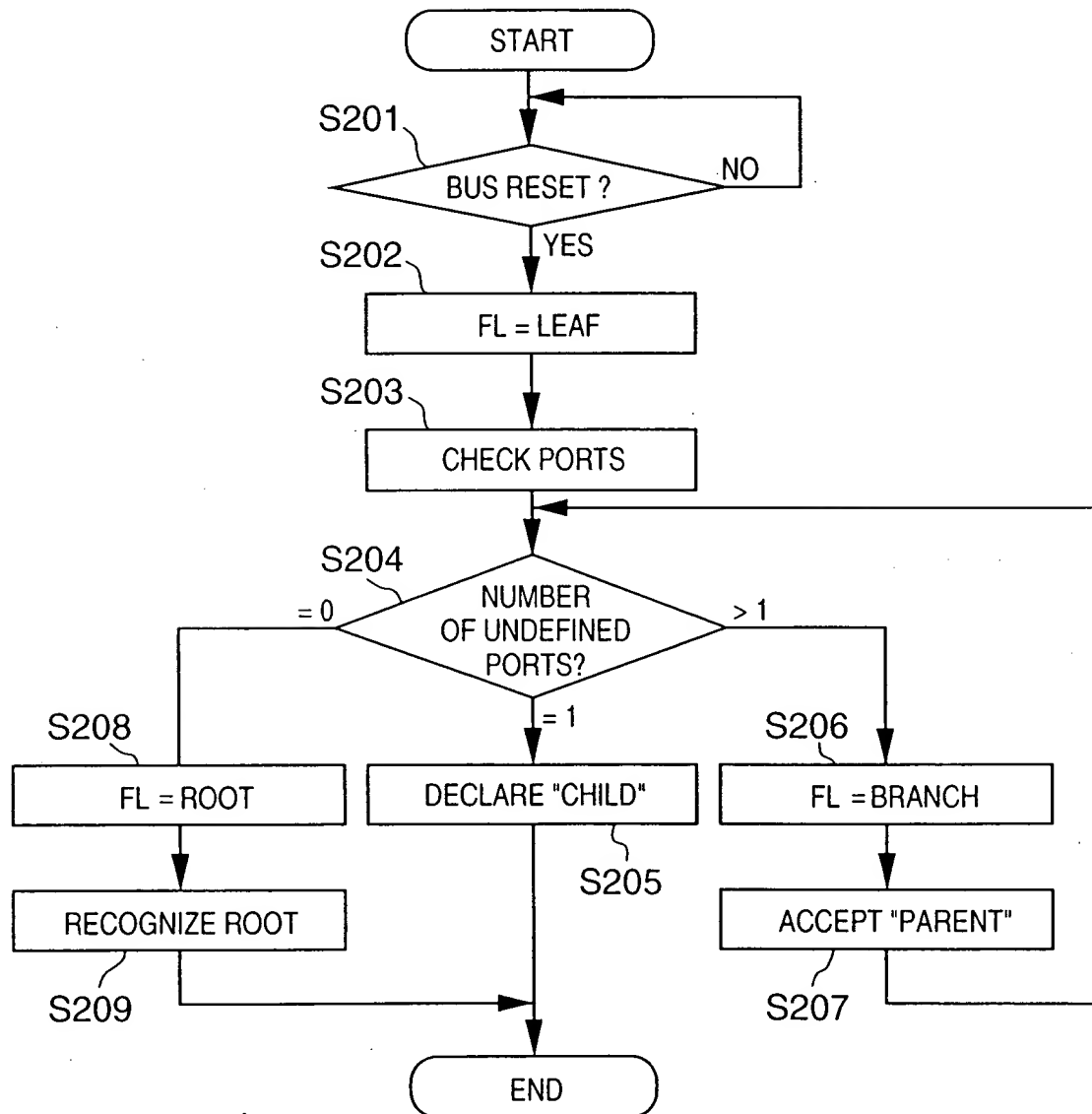


FIG. 7



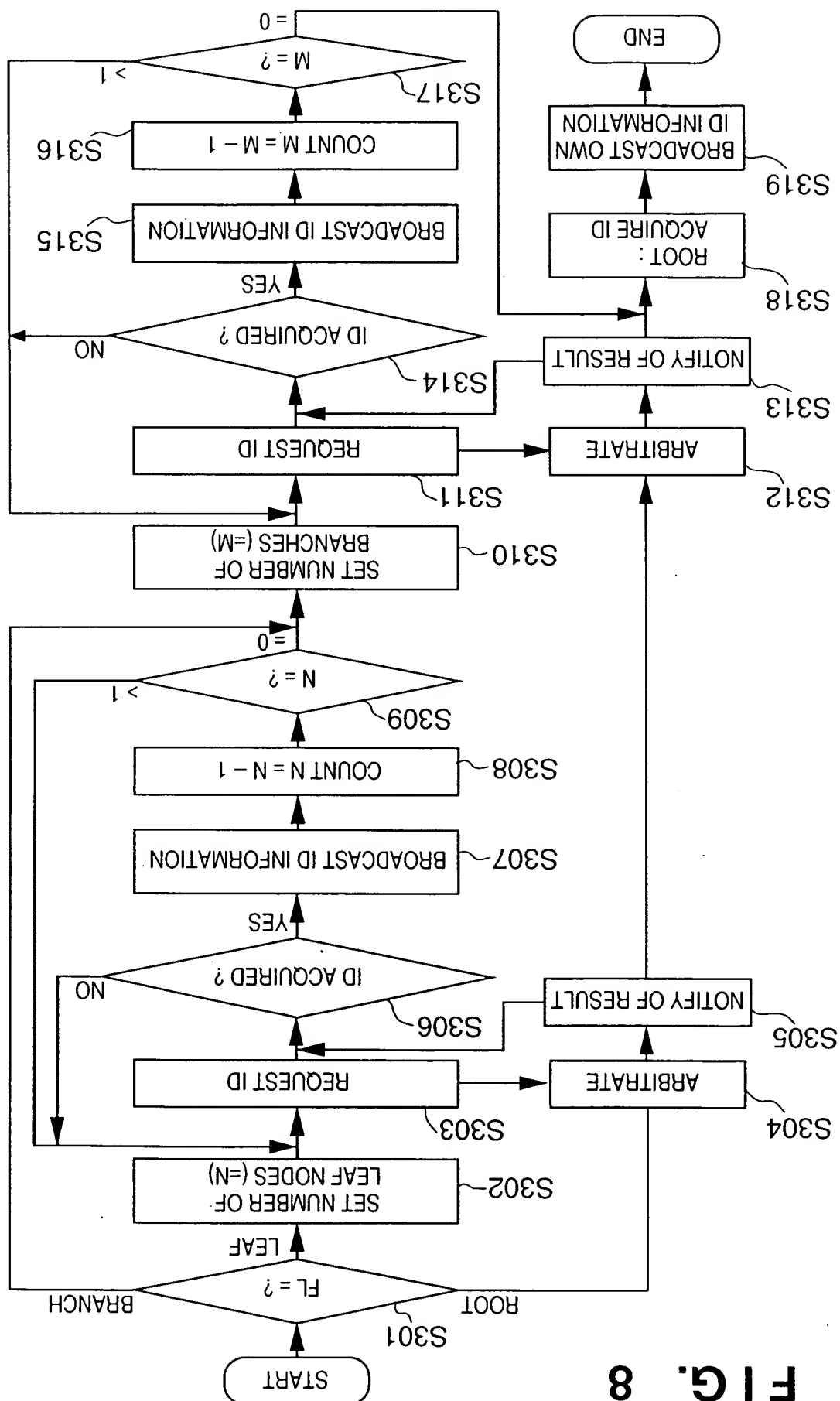


FIG. 8

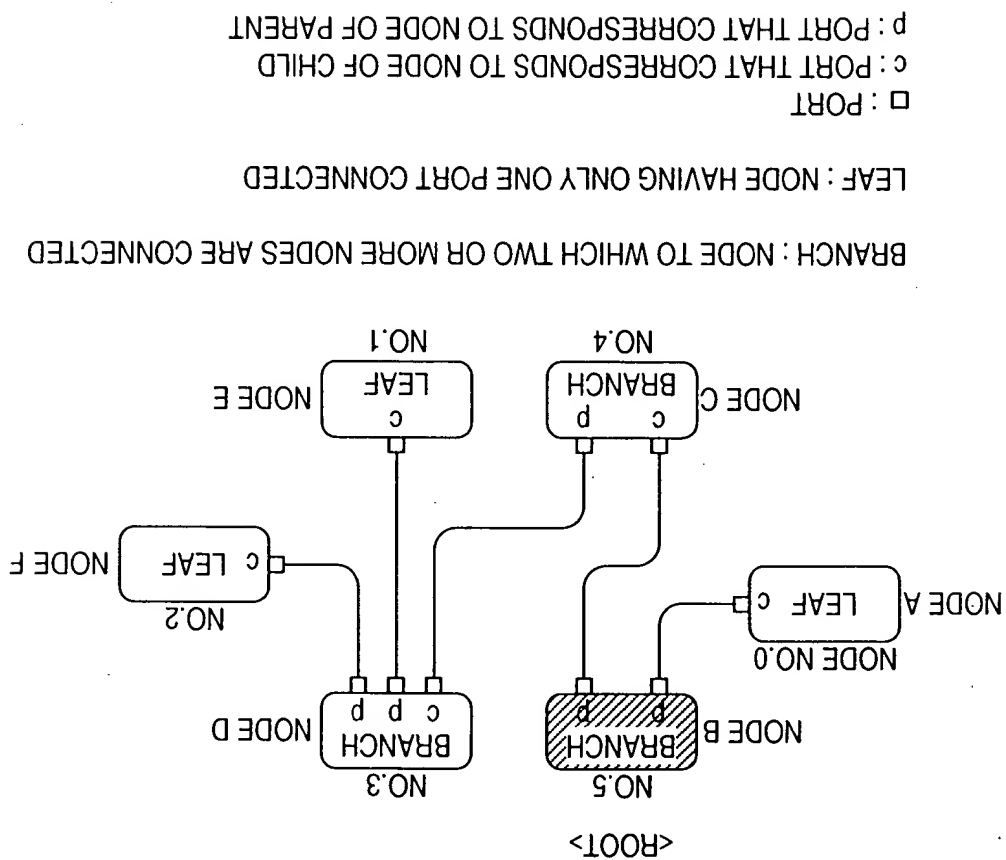


FIG. 9

FIG. 10
CSR CORE REGISTER

OFFSET (HEXADECIMAL)	REGISTER NAME	FUNCTION
000	STATE_CLEAR	INFORMATION ABOUT STATUS AND CONTROL
004	STATE_SET	INFORMATION INDICATIVE OF WHETHER STATE_CLEAR CAN BE WRITTEN
008	NODE_IDS	BUS ID + NODE ID
00C	RESET_START	RESET BUS BY WRITE IN THIS AREA
010~014	INDIRECT_ADDRESS, INDIRECT_DATA	REGISTER FOR ACCESS ROM LARGER THAN 1K
018~01C	SPLIT_TIMEOUT	VALUE OF TIMER FOR DETECTING TIME-OUT OF SPLIT TRANSACTION
020~02C	ARGUMENT, TEST_START, TEST_STATUS	DIAGNOSTIC REGISTER
030~04C	UNITS_BASE, UNITS_BOUND, MEMORY_BASE, MEMORY_BOUND	UNUSED IN IEEE1394
050~054	INTERRUPT_TARGET, INTERRUPT_MASK	INTERRUPT NOTIFYING REGISTER
058~07C	CLOCK_VALUE, CLOCK_TICK_PERIOD, CLOCK_STROBE_ARRIVED, CLOCK_INFO	UNUSED IN IEEE1394
080~0FC	MESSAGE_REQUEST, MESSAGE_RESPONSE	MESSAGE NOTIFYING REGISTER
100~17C		RESERVED
180~1FC	ERROR_LOG_BUFFER	RESERVED FOR IEEE1394

FIG. 11
SERIAL BUS REGISTER

OFFSET (HEXADECIMAL)	REGISTER NAME	FUNCTION
200	CYCLE_TIME	COUNTER FOR ISOSYNCHRONOUS TRANSFER
204	BUS_TIME	REGISTER FOR SYNCHRONIZING TIME
208	POWER_FAIL_IMMINENT	REGISTER CONCERNING POWER SUPPLY
20C	POWER_SOURCE	
210	BUSY_TIMEOUT	CONTROL RETRY OF TRANSACTION LAYER
214~218		RESERVED
21C	BUS_MANAGER_ID	NODE ID OF BUS MANAGER
220	BANDWIDTH_AVAILABLE	MANAGE ISOSYNCHRONOUS TRANSFER BANDWIDTH
224~228	CHANNELS_AVAILABLE	MANAGE ISOSYNCHRONOUS TRANSFER CHANNEL NUMBER
22C	MAINT_CONTROL	DIAGNOSTIC REGISTER
230	MAINT_UTILITY	
234~3FC		RESERVED

FIG. 12

SERIAL BUS DEVICE REGISTER

OFFSET (HEXADECIMAL)	REGISTER NAME	FUNCTION
800~FFC		RESERVED
1000~13FC	TOPOLOGY_MAP	INFORMATION ABOUT CONFIGURATION OF SERIAL BUS
1400~1FFC		RESERVED
2000~2FFC	SPEED_MAP	INFORMATION ABOUT TRANSFER SPEED OF SERIAL BUS
3000~FFFC		RESERVED

FIG. 13

CONFIGURATION ROM OF MINIMUM FORMAT

01	VENDOR ID
----	-----------

Bus Info Block Length		ROM Length	CRC
Bus Info Block			
Root Directory		Key	Entry_value
Key		Entry_value	
Node dependent info directory			
Unit directories		Root & unit leaves	
Function Directory			
Vendor dependent information			
Key		Entry_value	

FIG. 14

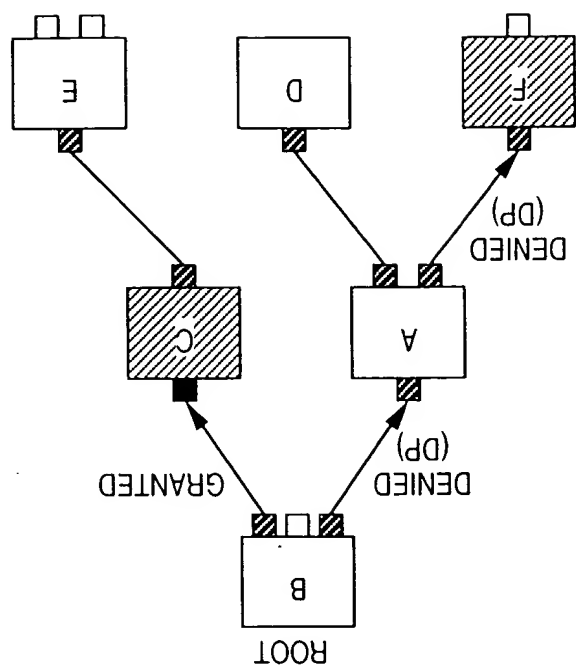
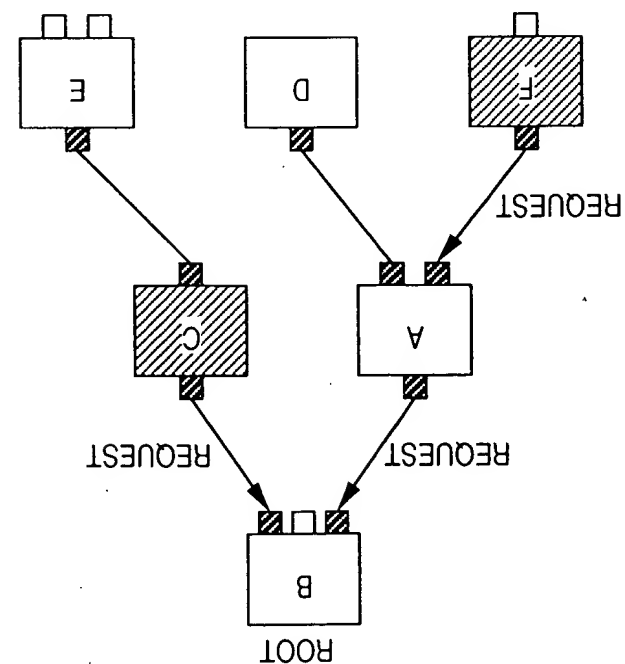


FIG. 15

REQUESTS FOR BUS ACCESS

BUS ACCESS GRANTED

FIG. 16



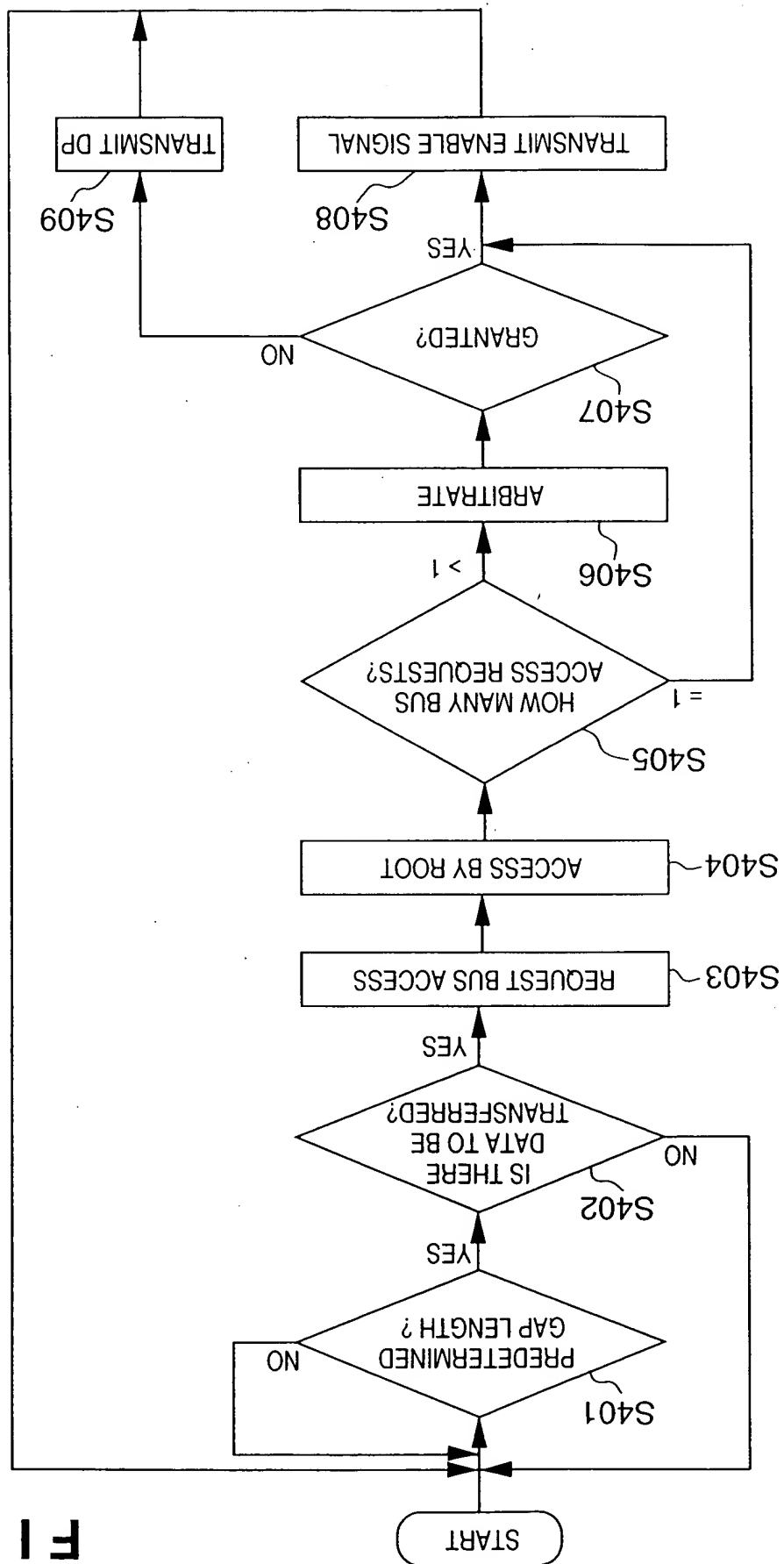


FIG. 17

FIG. 18

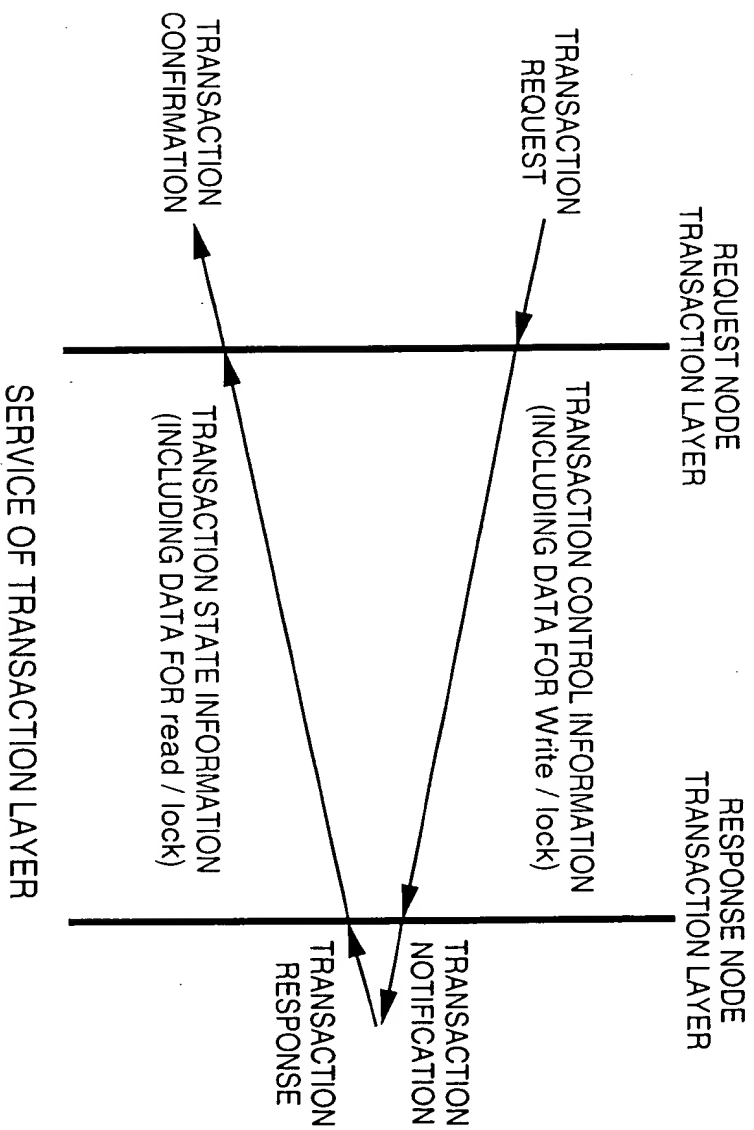


FIG. 19

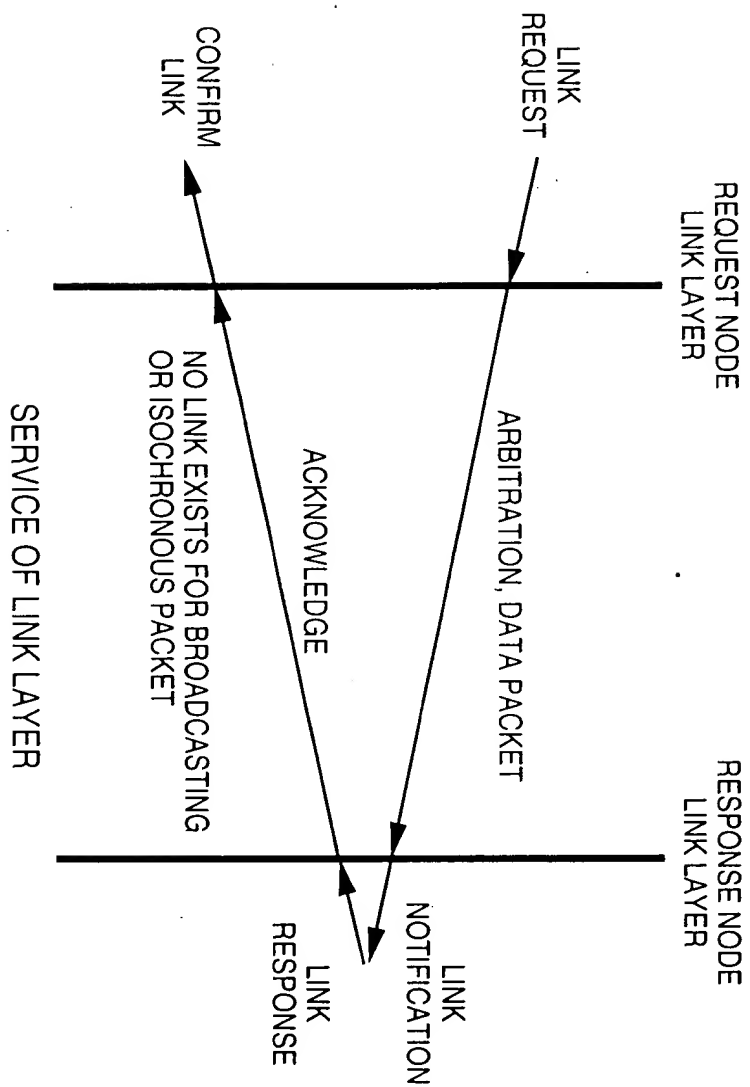


FIG. 20

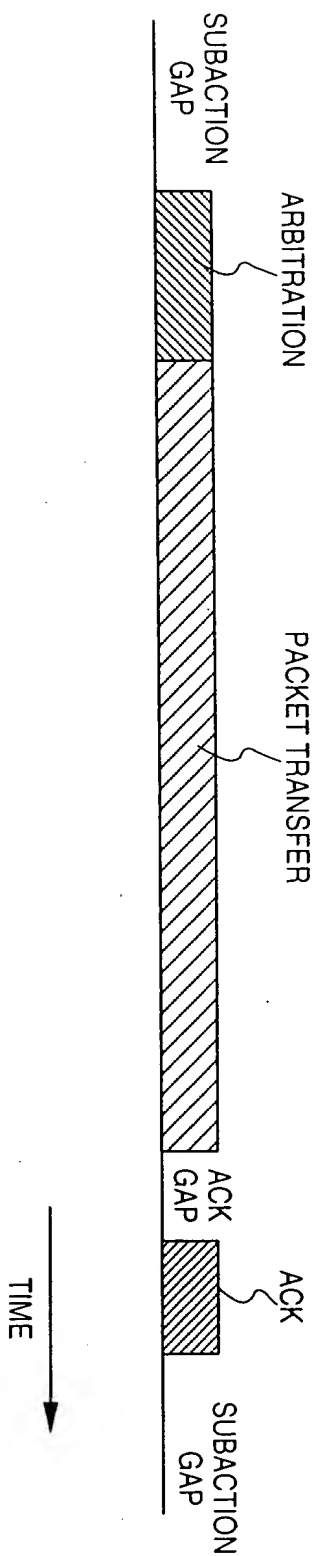


FIG. 21

destination_ID	t0	t1	tcode	pri
source_ID				
destination_offset				
data_length	extended_tcode			
header_CRC				
data_field				
pad_field				
data_CRC				

FIG. 22

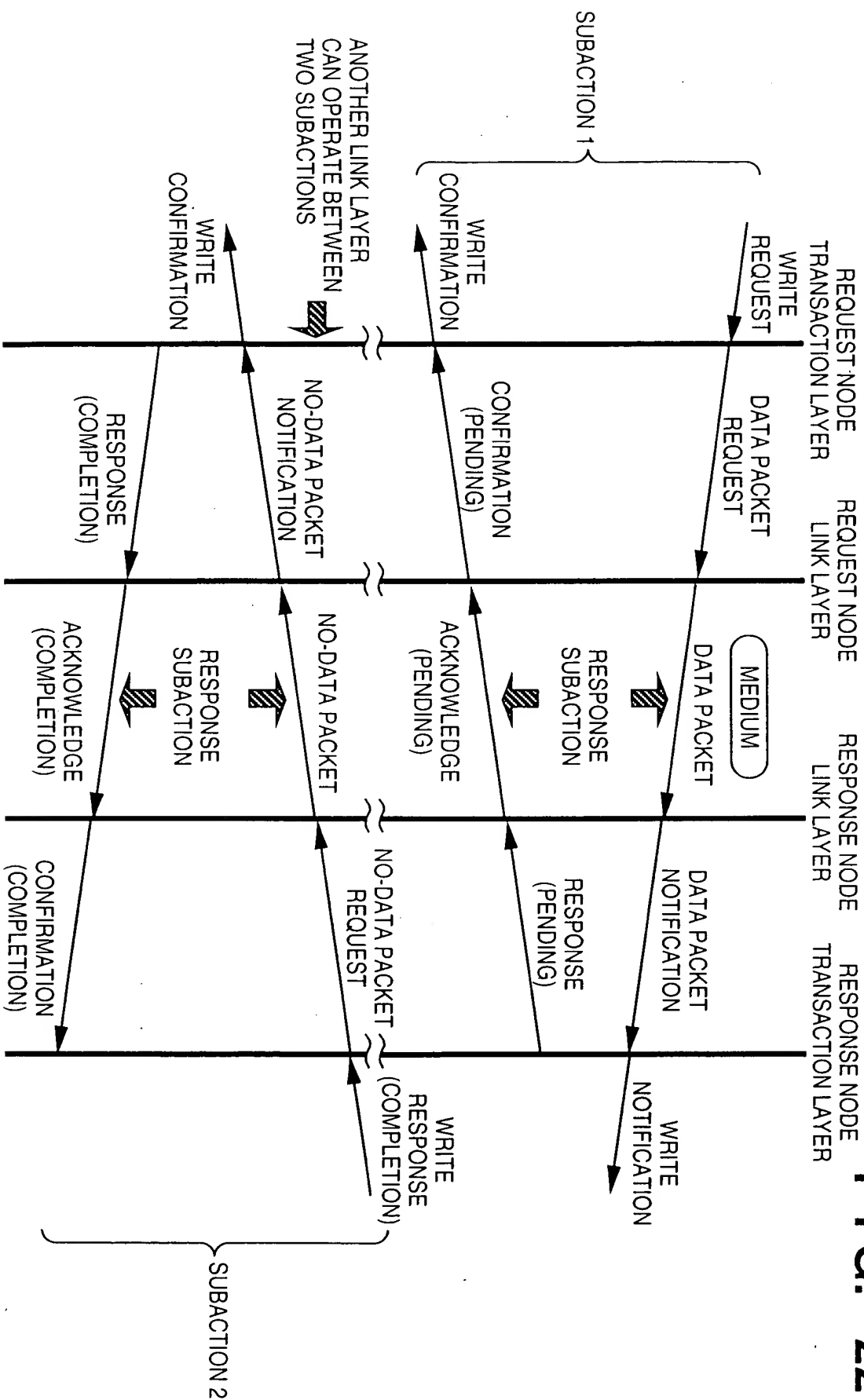


FIG. 23

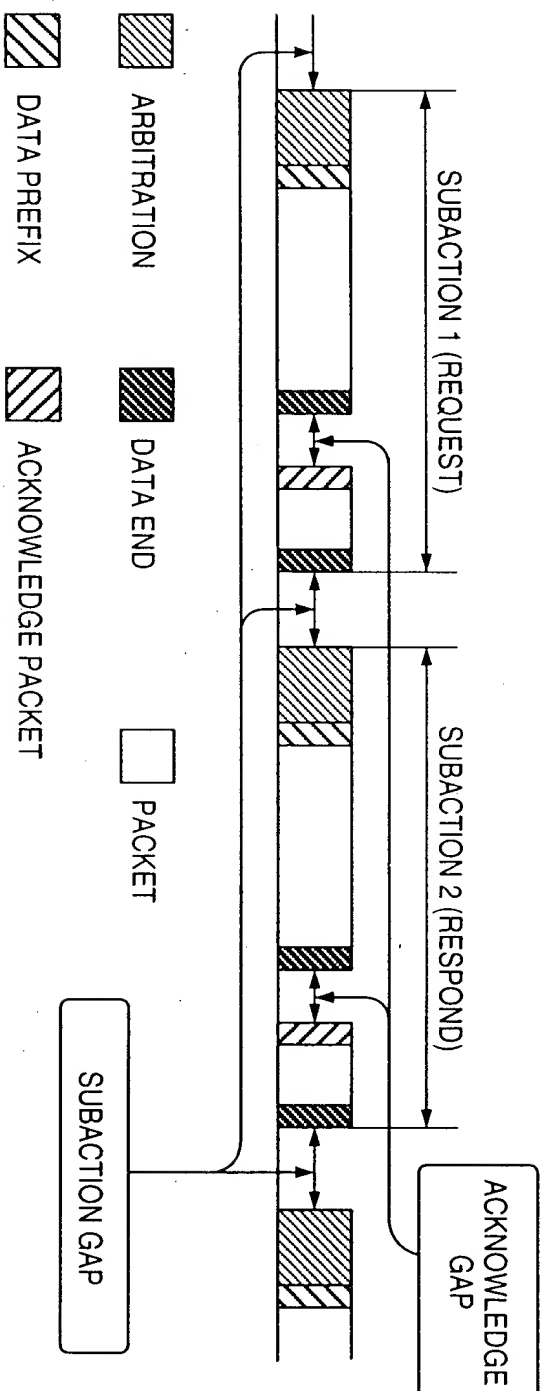


FIG. 24

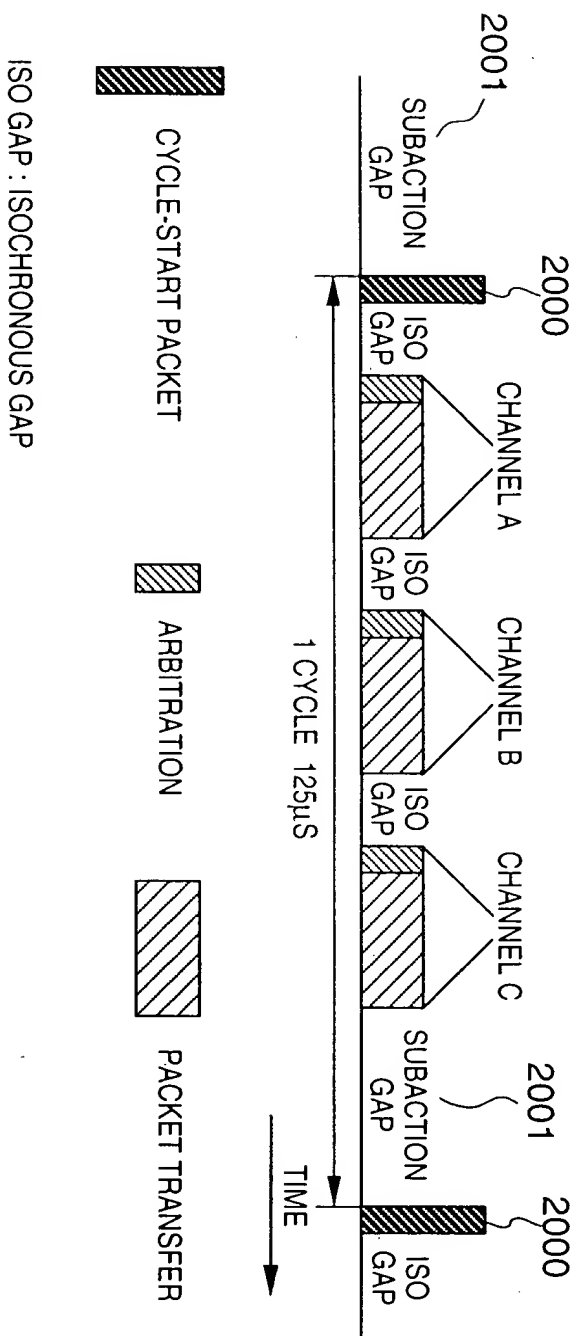


FIG. 25

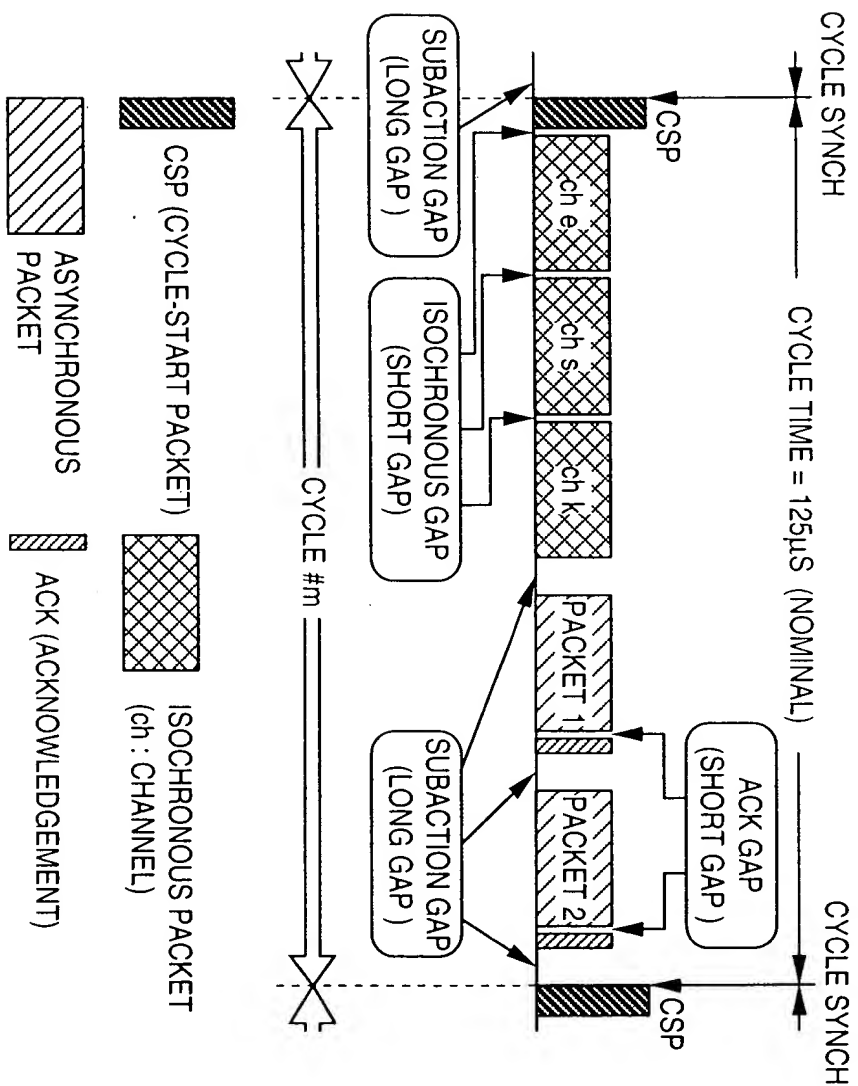
PACKET OF ISOCHRONOUS DATA

data_length	tag	channel	tcode	sy
header_CRC				
data_field				
pad_field				
data_CRC				

ABBREVIATION	NAME	CONTENT
destination_ID	destination identifier	REPRESENT ID OF DESTINATION NODE (FOR ONLY ASYNCHRONOUS TRANSFER)
t 0	transaction label	LABEL FOR REPRESENTING SERIES OF TRANSACTIONS (FOR ONLY ASYNCHRONOUS TRANSFER)
rt	retry code	CODE INDICATIVE OF RETRY STATUS (FOR ONLY ASYNCHRONOUS TRANSFER)
tcode	transaction code	CODE INDICATIVE OF TYPE OF PACKET (FOR ONLY ASYNCHRONOUS TRANSFER)
pri	priority	PRIORITY (FOR ONLY ASYNCHRONOUS TRANSFER)
source_ID	source identifier	TRANSMISSION SOURCE NODE (FOR ONLY ASYNCHRONOUS TRANSFER)
destination_offset	destination memory address	MEMORY ADDRESS OF DESTINATION NODE (FOR ONLY ASYNCHRONOUS TRANSFER)
rcode	response code	RESPONSE STATUS (FOR ONLY ASYNCHRONOUS TRANSFER)
quadlet_data	quadlet (4bytes) data	4-BYTE DATA (FOR ONLY ASYNCHRONOUS TRANSFER)
data_length	length of data	LENGTH OF data_field (EXCEPT FOR pad bytes)
extended_tcode	extended transaction code	EXTENDED TRANSACTION CODE (FOR ONLY ASYNCHRONOUS TRANSFER)
channel	isochronous identifier	IDENTIFY ISOCHRONOUS PACKET
sy	synchronization code	USED TO SYNCHRONIZE VIDEO DATA, AUDIO DATA, AND THE LIKE (FOR ONLY ASYNCHRONOUS TRANSFER)
cycle_time_data	contents of the CYCLE_TIME register	VALUE OF CYCLE TIMER REGISTER OF CYCLE MASTER NODE (FOR ONLY CYCLE PACKET)
data_field	data + pad bytes	DATA IS STORED (FOR ISOCHRONOUS AND ASYNCHRONOUS TRANSFER)
header_CRC	CRC for header field	CRC CORRESPONDING TO HEADER
data_CRC	CRC for data field	CRC CORRESPONDING TO DATA
tag	tag label	FORMAT OF ISOCHRONOUS PACKET

FIG. 26

FIG. 27



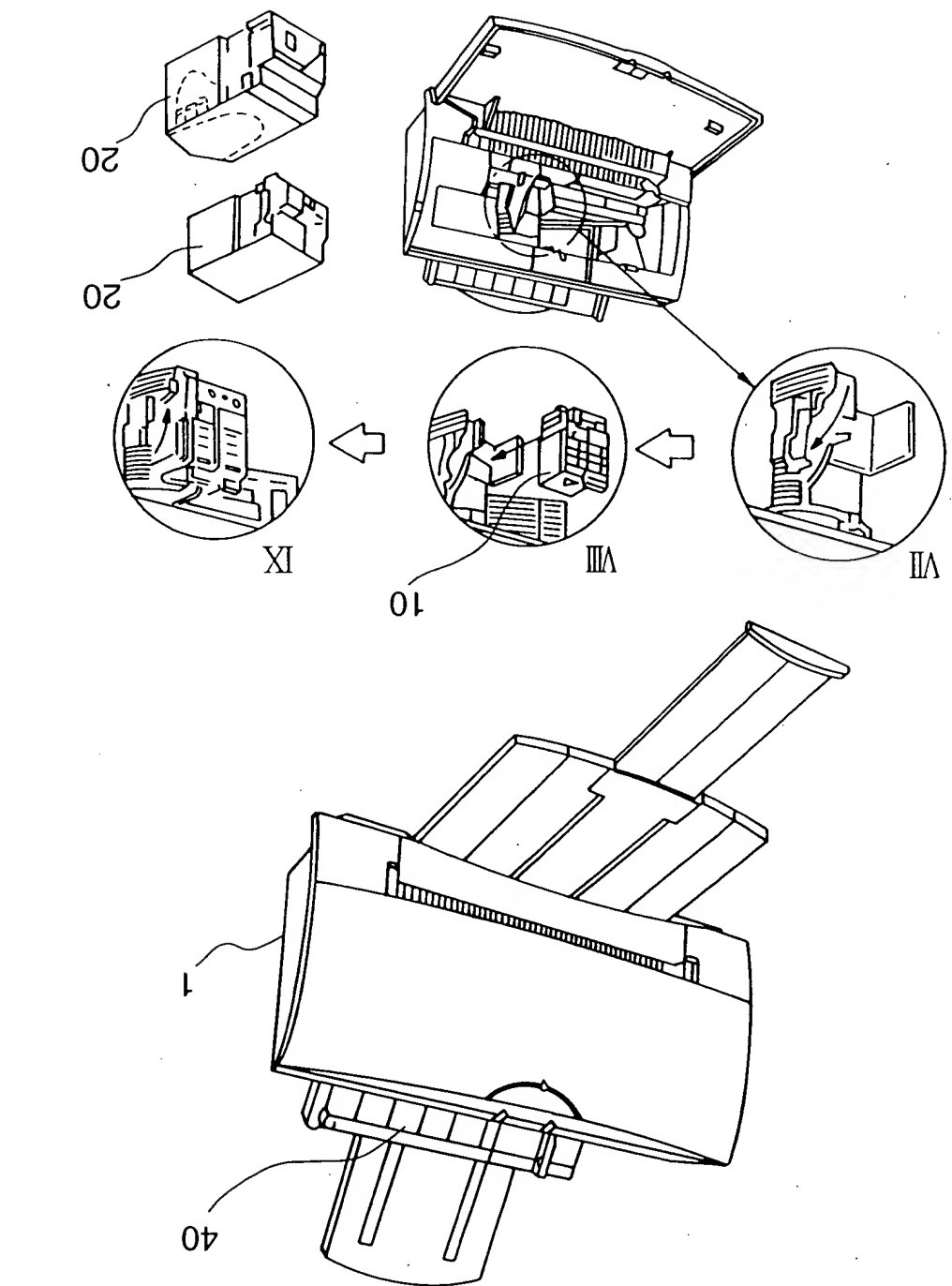


FIG. 28

FIG. 29

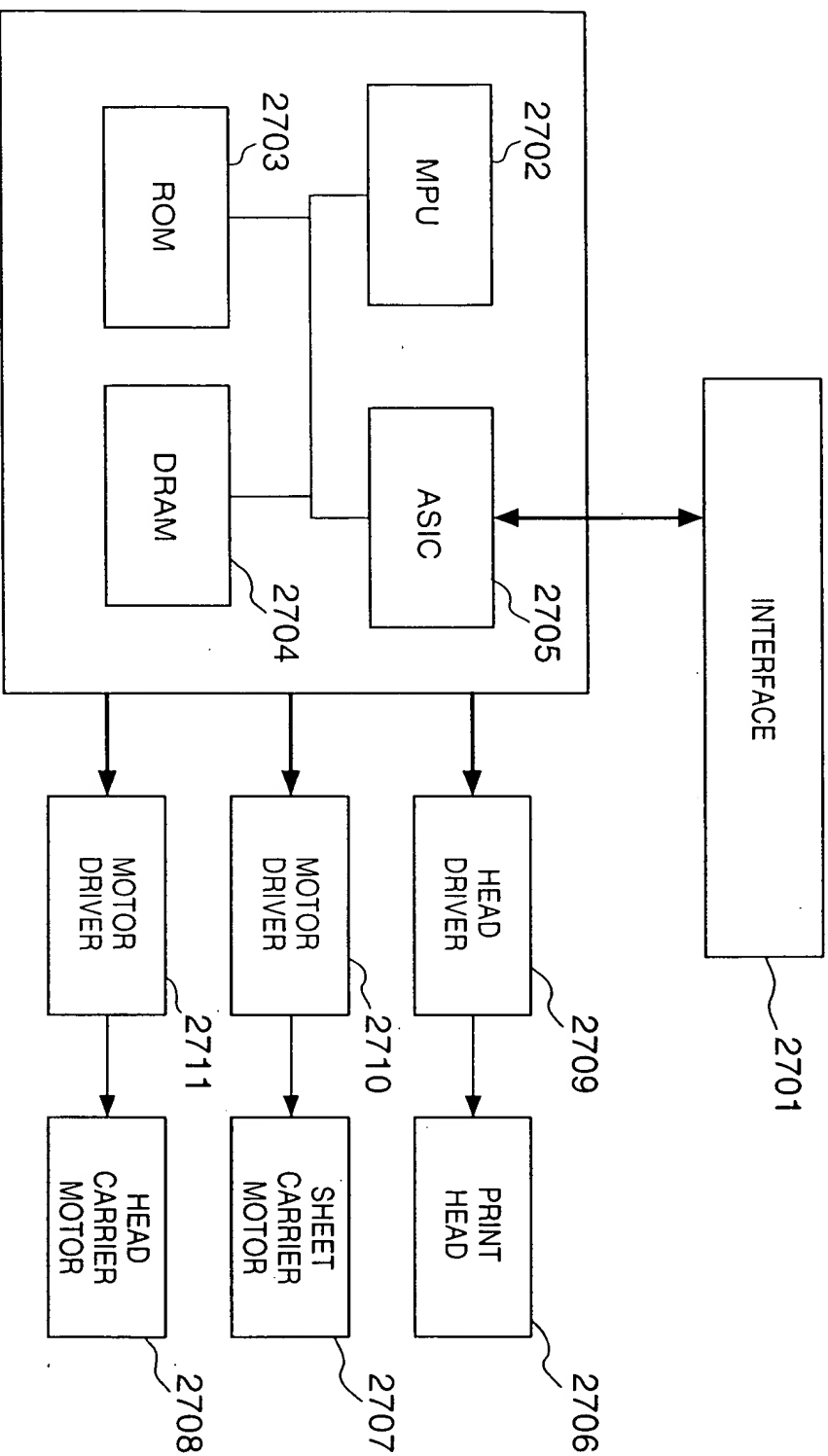
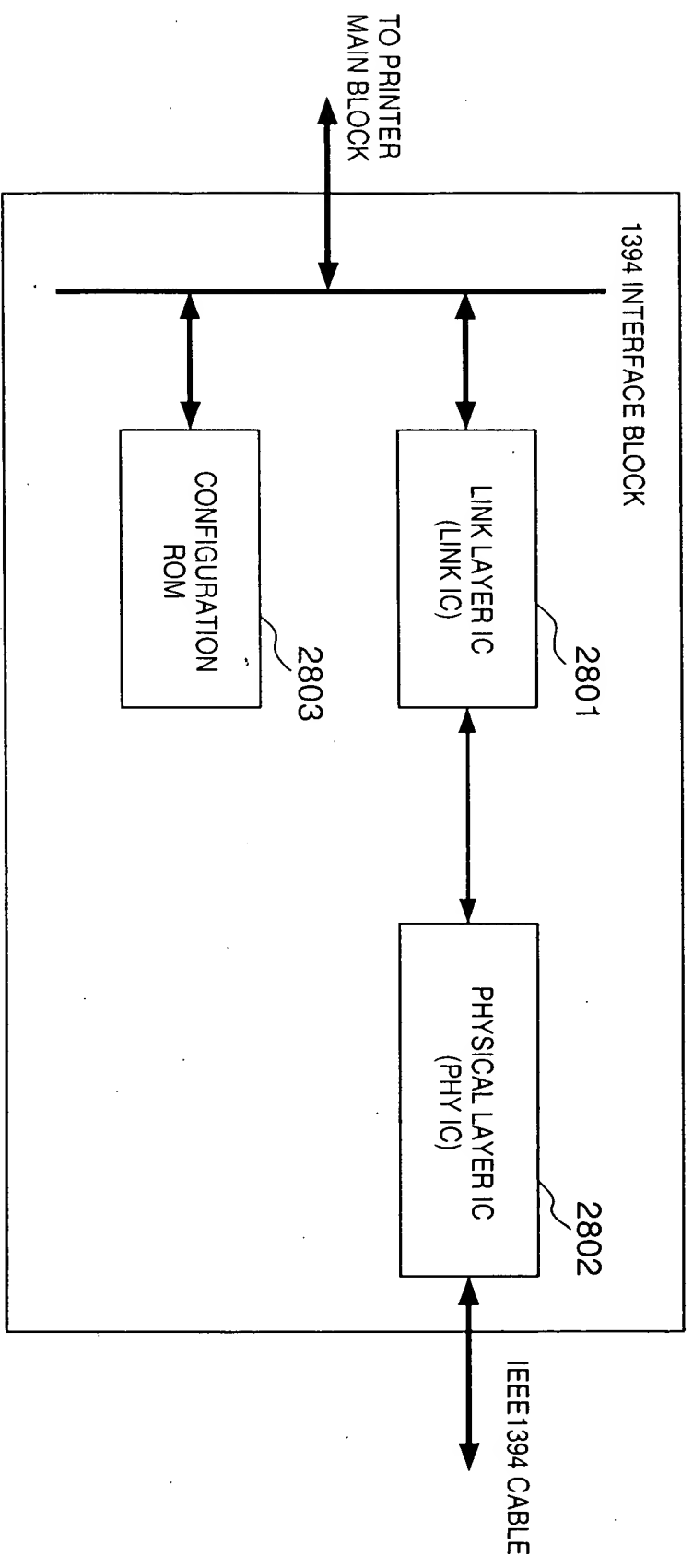


FIG. 30



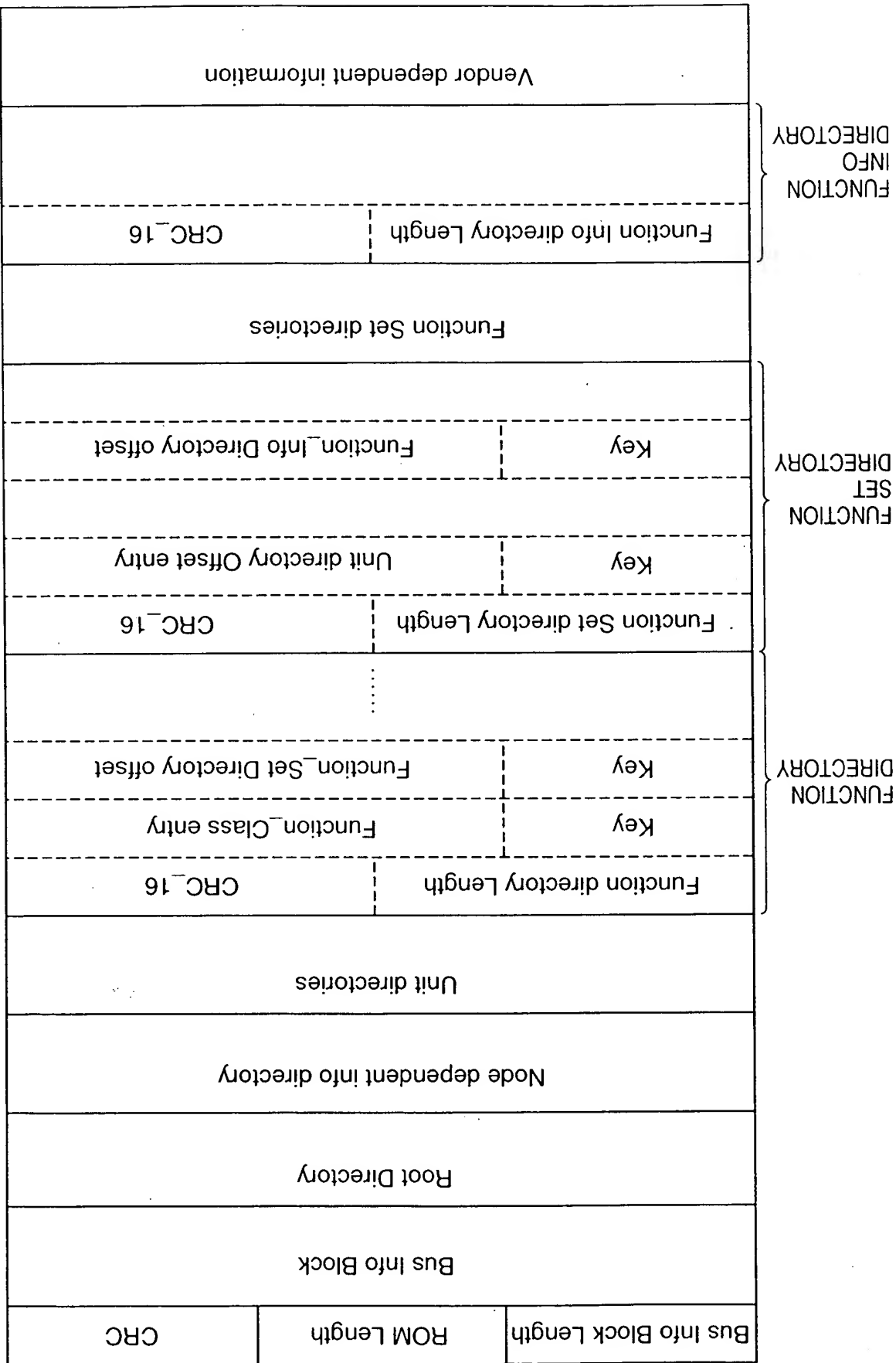


FIG. 31

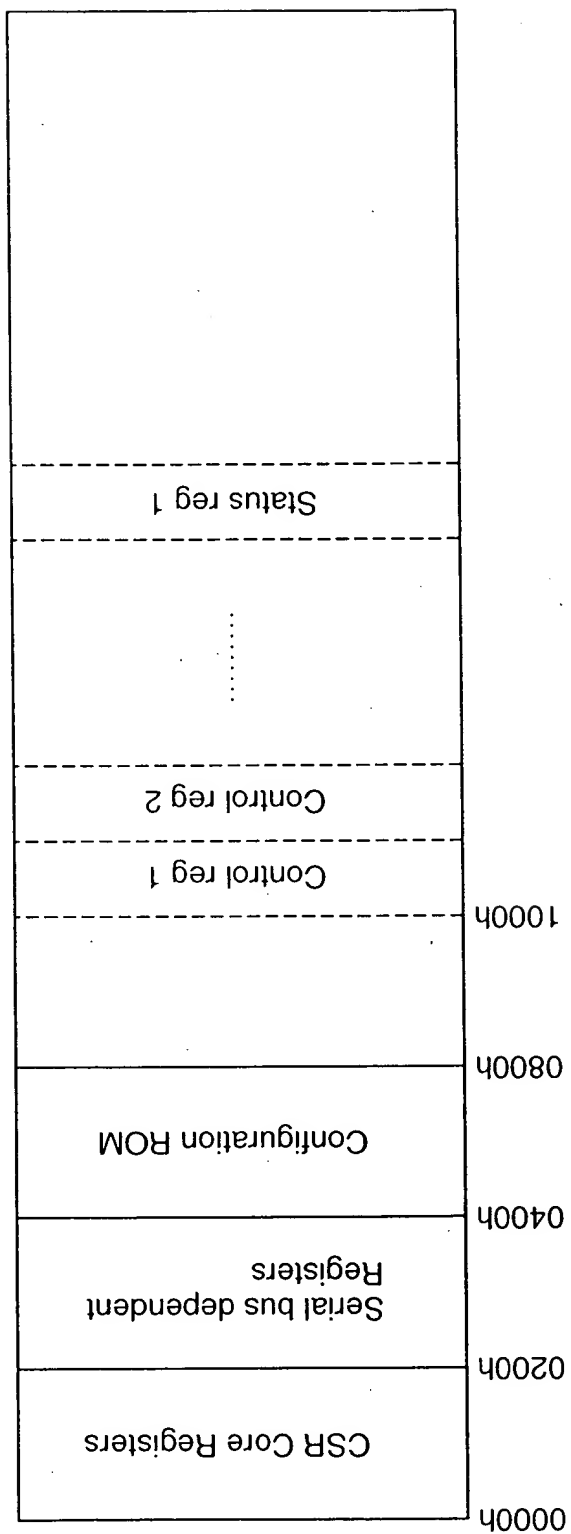


FIG. 32

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F I G. 33

FIG. 34

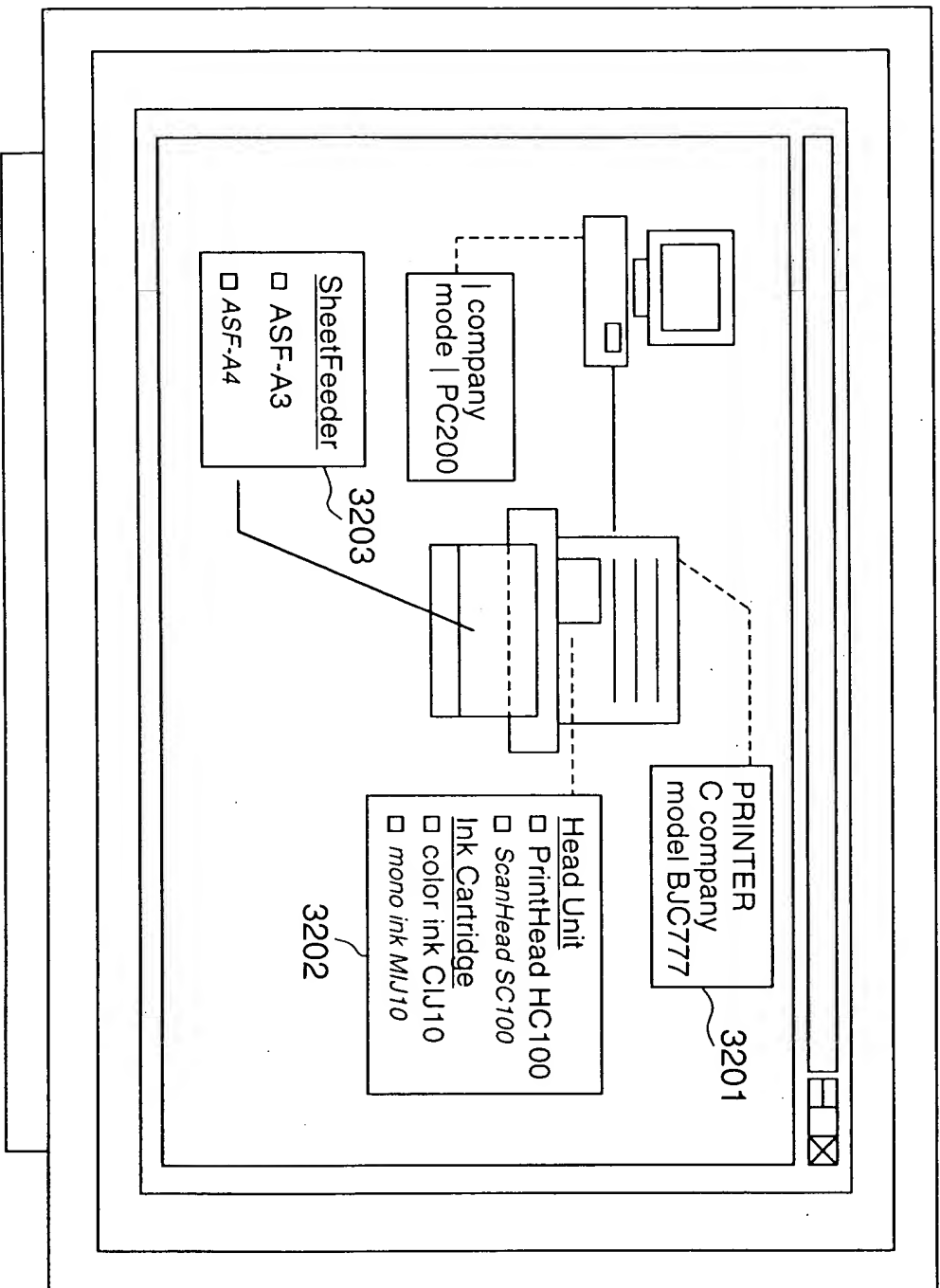
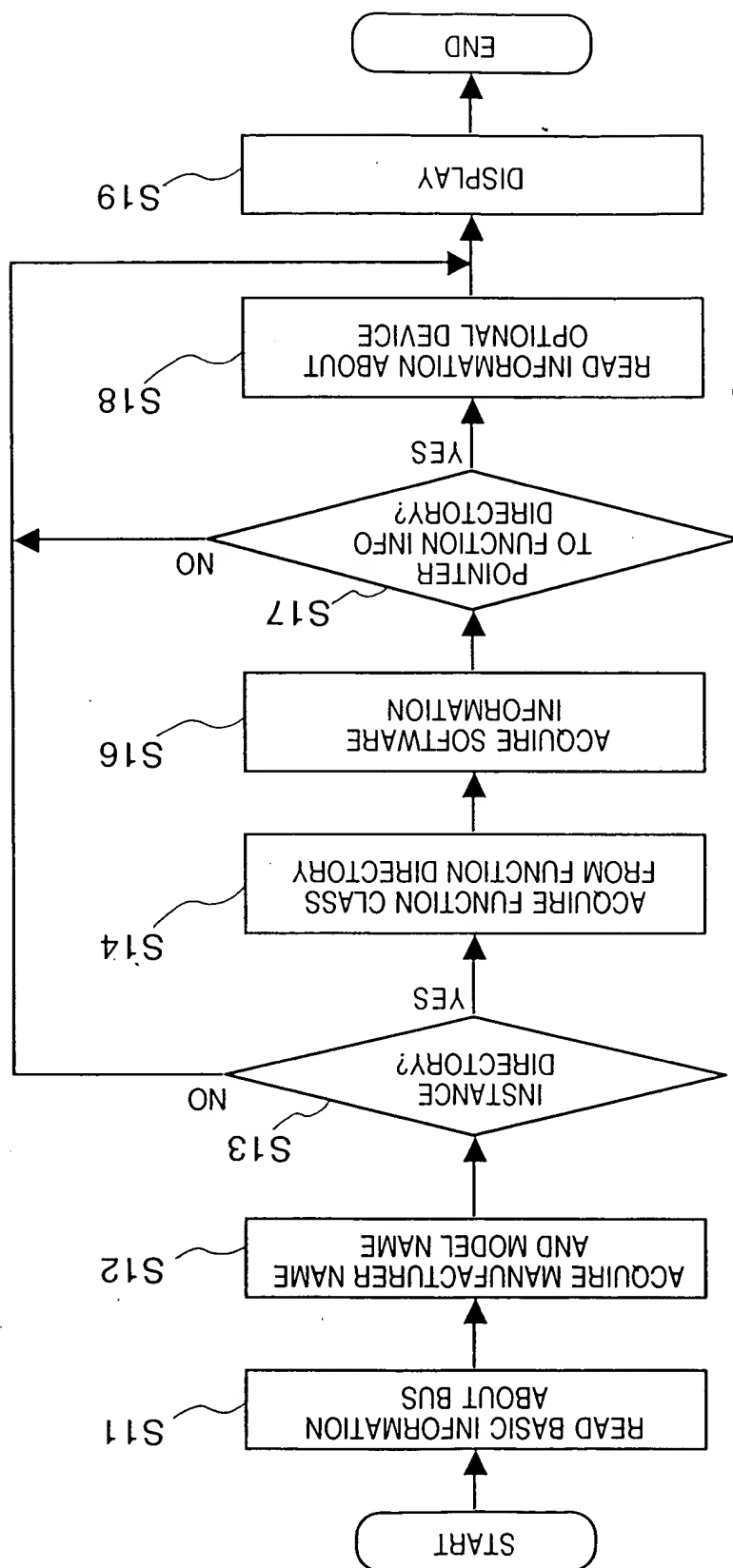


FIG. 35



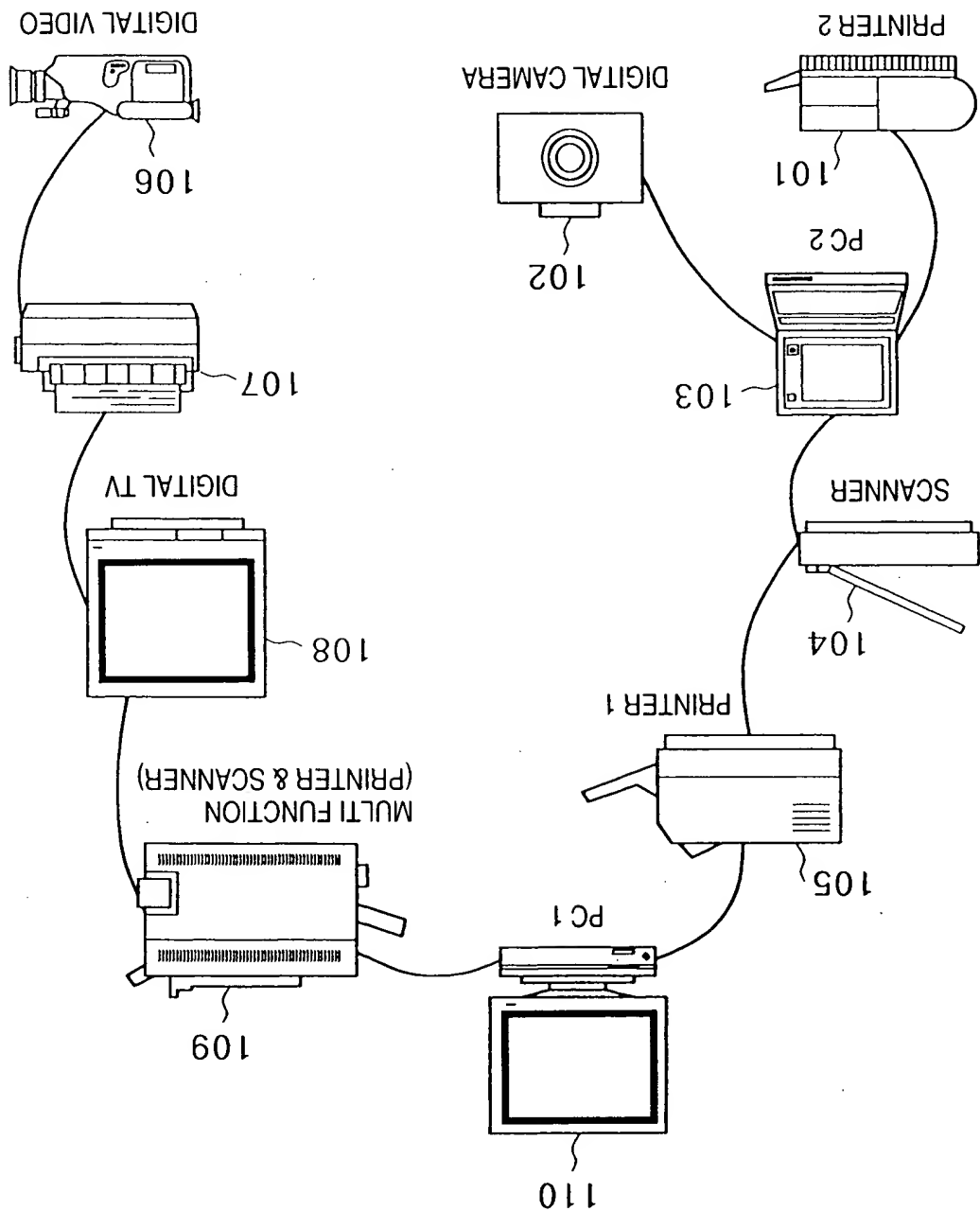


FIG. 36

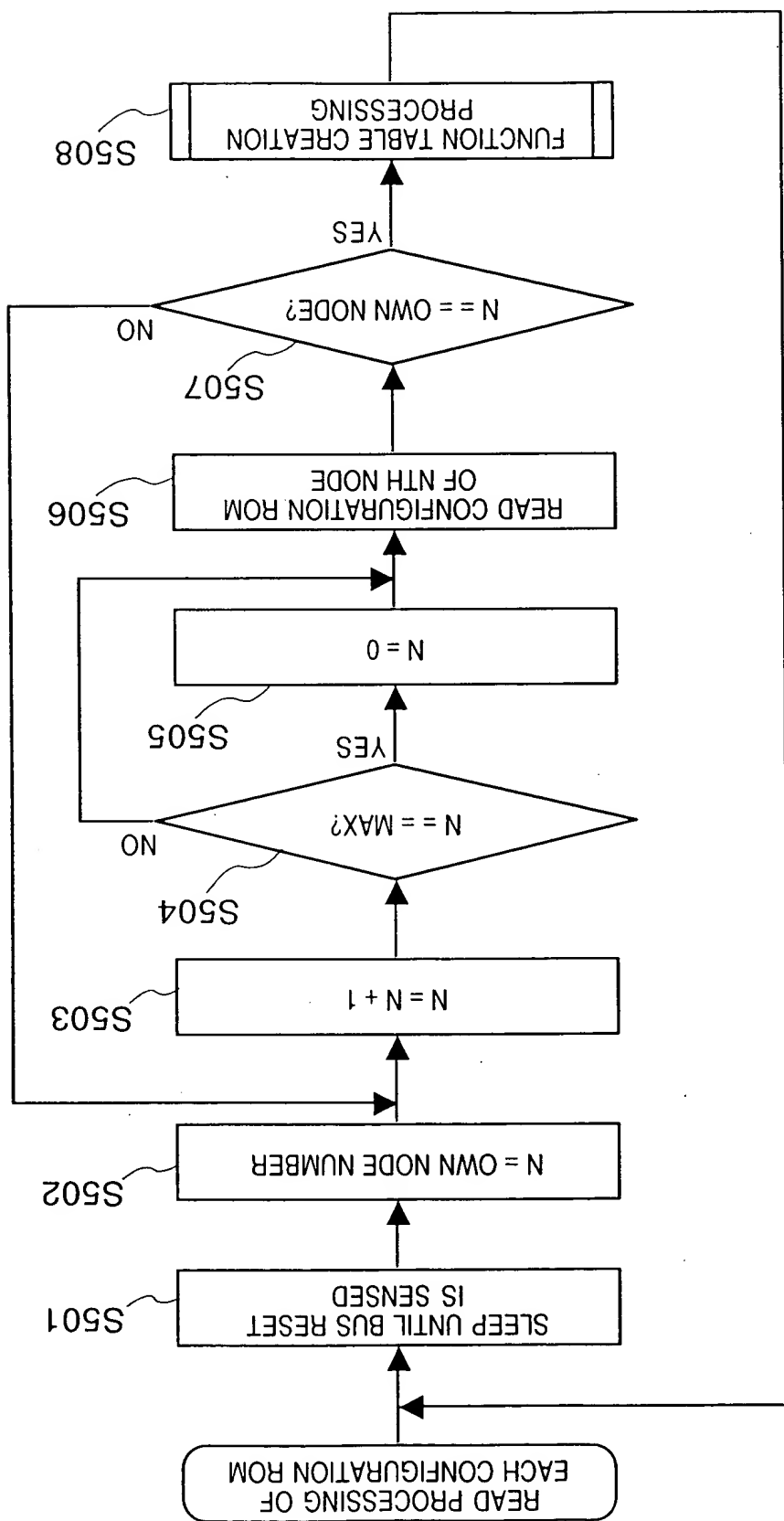


FIG. 37

FIG. 38A

INPUT	IMAGE PROCESSING	SPEED	QUALITY
DIGITAL CAMERA	<input type="radio"/>	6.0	XGA
SCANNER	X	0.5	2400dpi
DIGITAL VIDEO (*)	X	10.0	VGA
DIGITAL TV (*)	X	X	VGA
MULTI FUNCTION (*)	<input type="radio"/>	2.0	1200dpi

FIG. 38B

OUTPUT	IMAGE PROCESSING	SPEED	QUALITY
PRINTER 1	<input type="radio"/>	1.5	720dpi
PRINTER 2	<input type="radio"/>	1.5	720dpi
PRINTER 3	X	1.0	360dpi
DIGITAL VIDEO (*)	X	10.0	VGA
DIGITAL TV (*)	X	X	VGA
MULTI FUNCTION (*)	<input type="radio"/>	2.0	1200dpi

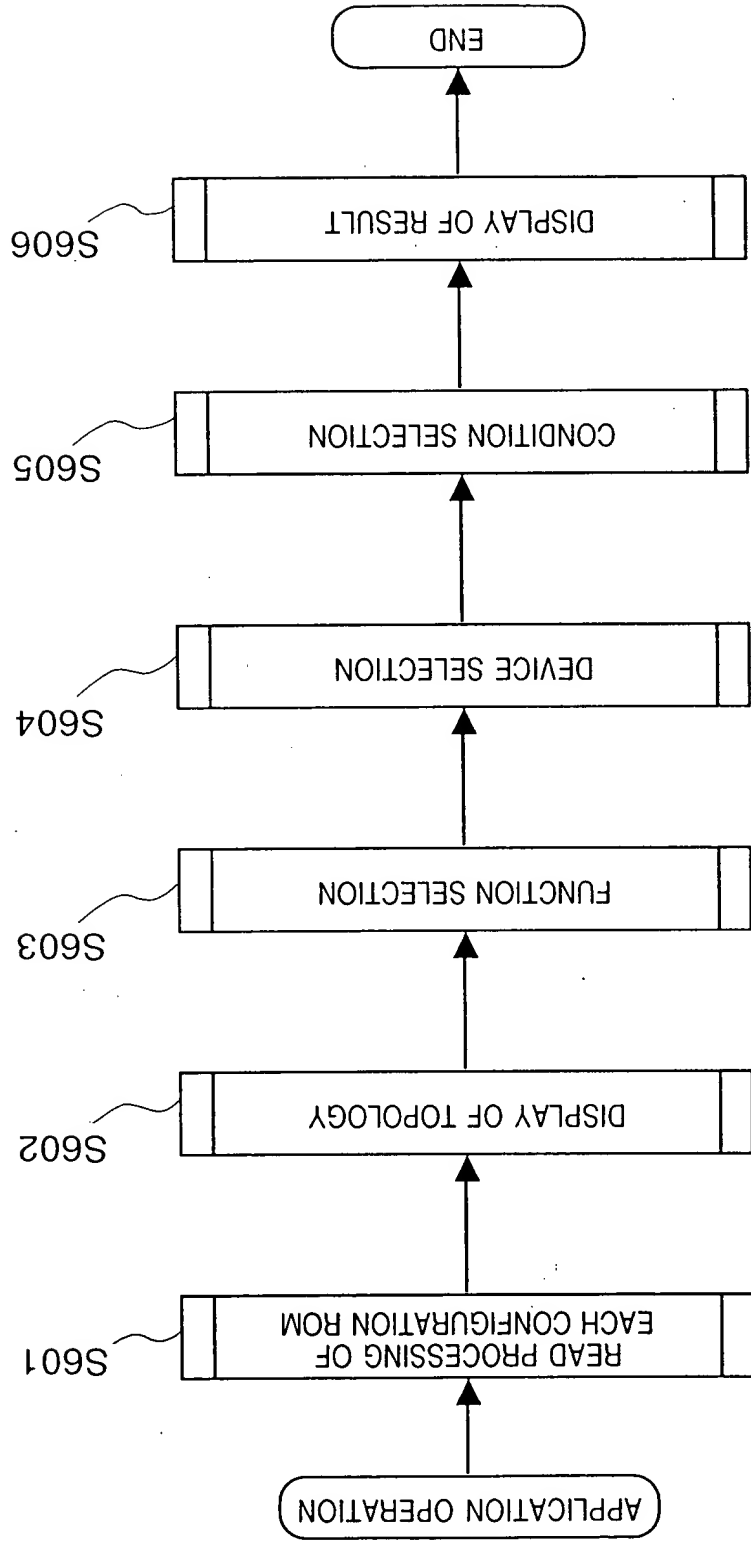


FIG. 39

FIG. 40

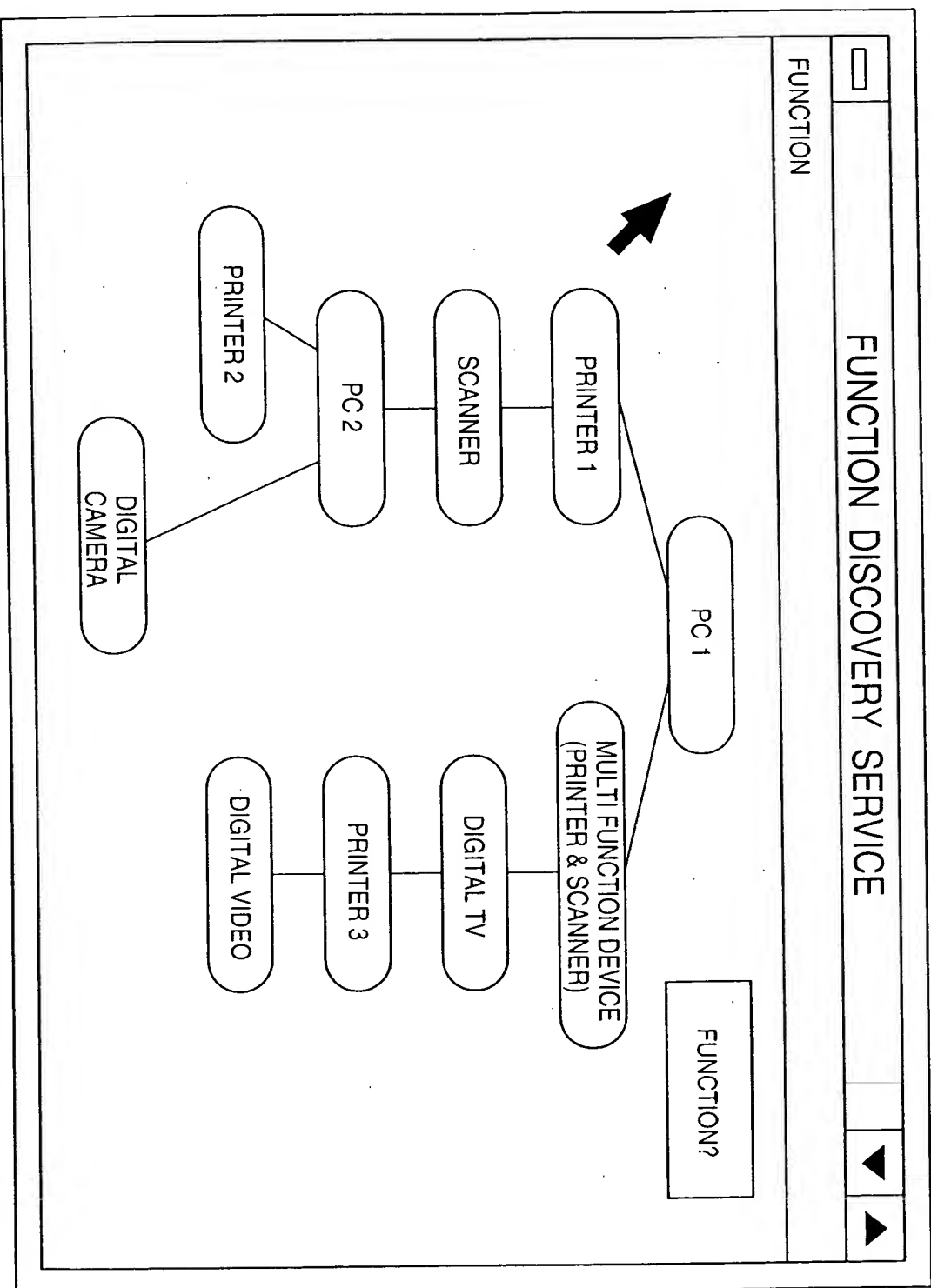


FIG. 41

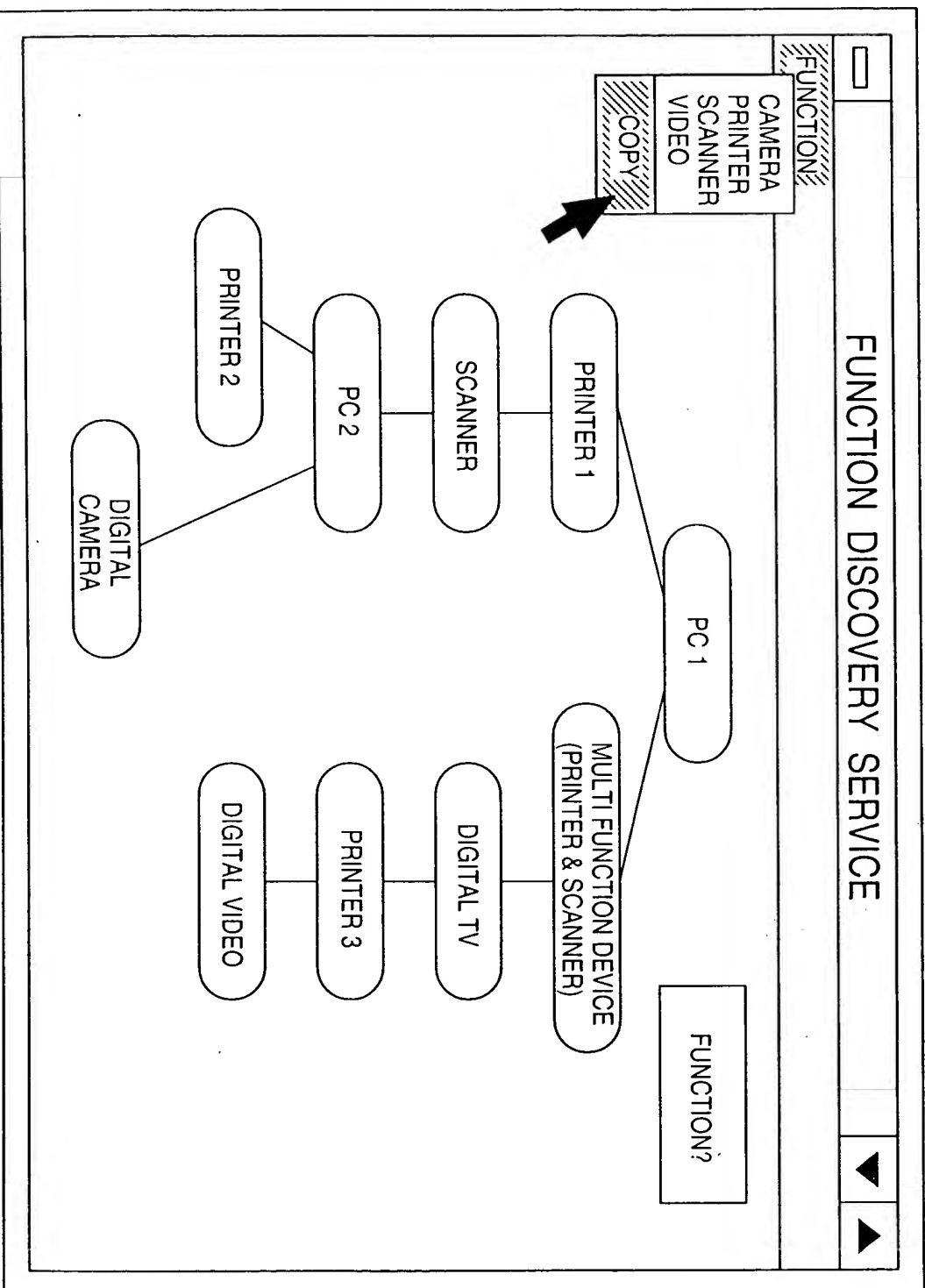


FIG. 42

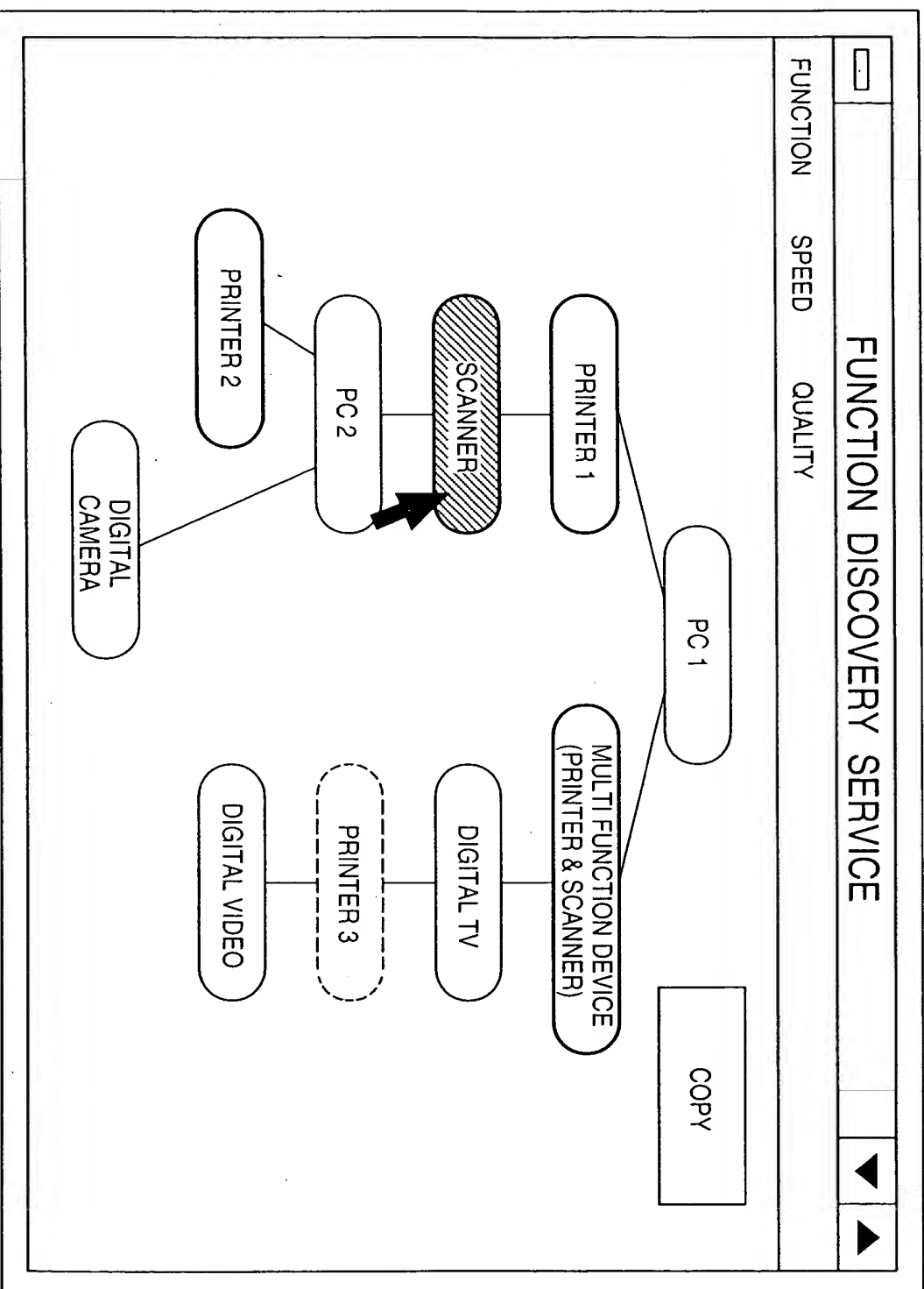


FIG. 43

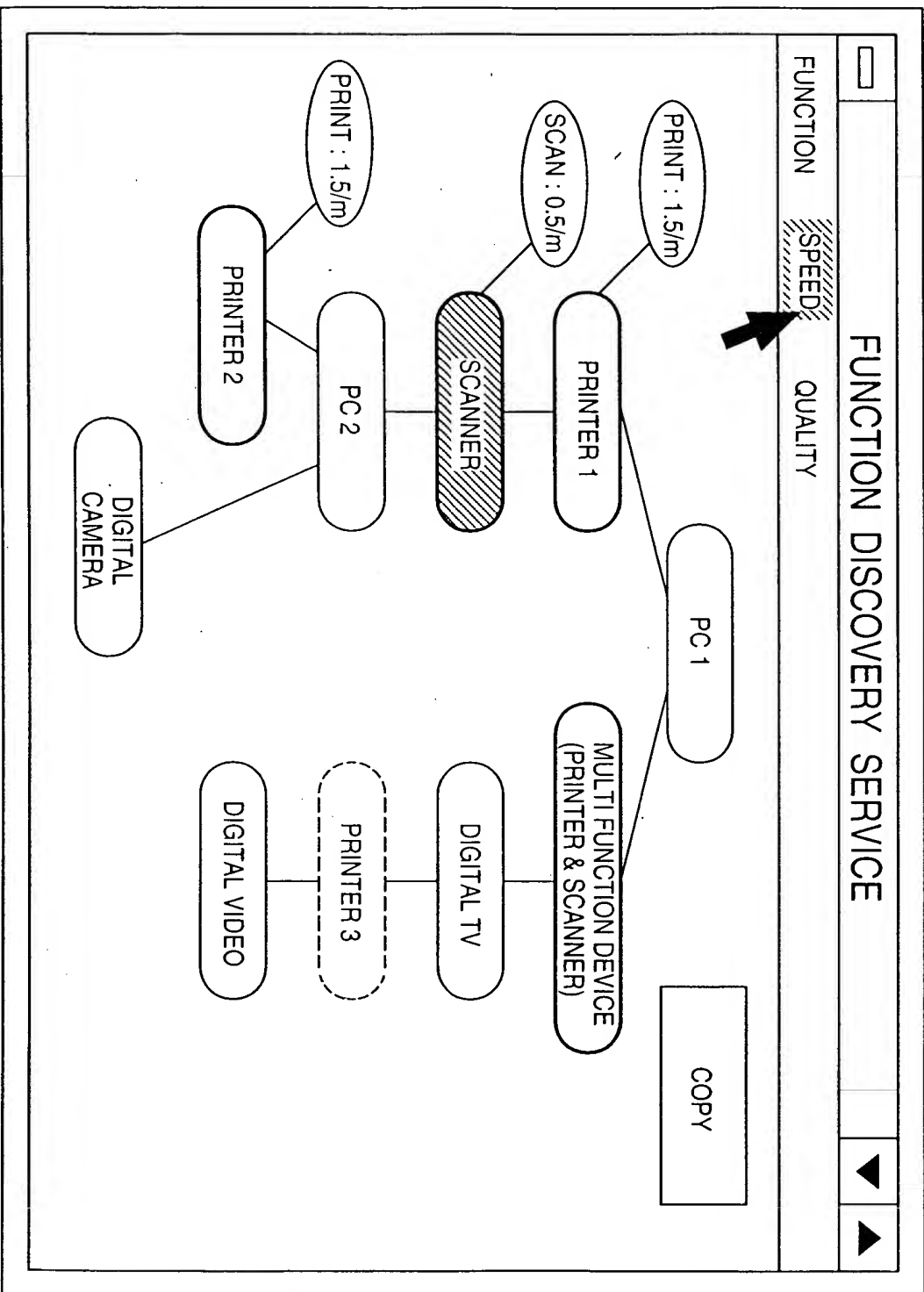


FIG. 44

